Table 1 - DPS L4 Requirements Changes

<u>Note</u>: L4 requirement S-DPS-60242 (in 11/8 RTM baseline) has been deleted from this table since it has subsequently bee deleted from the RTM database via CCR 96-1207B.

L4 id	req_ke	rel	req_type	req_status	ver_met hod	ver_status	CCR	clarific ation	text
S-DPS- 20020	y 11669	<u>BB0</u>	functional	approved	test	unverified	96- 1059A	ation	The PRONG CI shall have the capability to incorporate DAAC-developed software required to support discipline specific needs.
S-DPS- 20030	8653	<u>BB0</u>	performanc e	approved	test	unverified			The PRONG CI shall be capable of operating in a 24-hour a day, 7-day week mode.
S-DPS- 20150	8654	<u>BB1</u>	interface	approved	test	unverified			The PRONG CI shall provide Accounting Management data to the MSS using a MSS provided Accounting Management API.
S-DPS- 20614	10650	<u>B_B0</u>	functional	approved	test	unverified	96- 0822A		The PRONG CI shall be capable of using Data Server subsetting services when it requests input data sets to be staged.
S-DPS- 20616	10651	<u>BB0</u>	functional	approved	test	unverified	96- 0822A		The PRONG CI shall be capable of using Data Server subsampling services when it requests input data sets to be staged.
S-DPS- 20691	10049	<u>BB1</u>	functional	approved	test	unverified			The PRONG CI shall base the staging of input data on the predicted PGE execution start time and the estimated staging time.
S-DPS- 20694	11670	<u>BB0</u>	functional	approved	test	unverified	96- 1059A		The PRONG CI shall cancel input data staging if the DPR that initiated the input data staging is canceled.
S-DPS- 20695	11671	<u>BB0</u>	functional	approved	test	unverified	96- 1059A		The PRONG CI shall delete the staged input data for a DPR if that DPR is canceled and no other DPR needs it.
S-DPS- 20696	11672	<u>₿₿1</u>	functional	approved	test	unverified	96- 1059A		The PRONG CI shall complete the process of staging the input data and defer the execution of the PGE if the suspend command is received while the data is being staged.
S-DPS- 21124	8663	<u>BB1</u>	interface	approved	test	unverified			The PRONG CI shall receive advertisements from the IOS.
S-DPS-	8664	<u>BB1</u>	interface	approved	test	unverified			The PRONG CI shall send advertisement

21126								subscriptions to the IOS.
S-DPS- 21730	11673	<u>₿B1</u>	functional	approved	test	unverified	96- 1059A	The operations staff shall have the capability to suspend the processing of a Data Processing Request.
S-DPS- 21740	11674	<u>BB1</u>	functional	approved	test	unverified	96- 1059A	The operations staff shall have the capability to resume suspended processing of a Data Processing Request.
S-DPS- 21855	8667	<u>BB1</u>	functional	approved	test	unverified		The PRONG CI GUI shall conform to the guidelines in version 5.1 of the ECS User Interface Style Guide.
S-DPS- 21856	8668	<u>BB1</u>	functional	approved	test	unverified		To the extent possible, the PRONG CI COTS GUI shall be configured to conform to the guidelines in version 5.1 of the ECS User Interface Style Guide.
S-DPS- 21860	8669	<u>BB1</u>	functional	approved	test	unverified		The PRONG CI HMI Functions shall be accessible via an API (Application Program Interface).
S-DPS- 22560	11675	<u>BB1</u>	functional	approved	test	unverified	96- 1059A	The PRONG CI shall update the Processing State to suspend when the Operation Command specifies suspension.
S-DPS- 22590	11676	<u>BB1</u>	functional	approved	test	unverified	96- 1059A	The PRONG CI shall not perform any further processing on a Data Processing Request which is suspended.
S-DPS- 22600	11677	<u>BB1</u>	functional	approved	test	unverified	96- 1059A	The PRONG CI shall reject the Operation Command which specified a resume if the Data Processing Request was not suspended.
S-DPS- 22611	11678	<u>BB1</u>	functional	approved	test	unverified	96- 1059A	When the resume Operation Command is used to resume processing for a Data Processing Request, the PRONG CI shall update the Processing State to the previous Processing State before the suspension.
S-DPS- 24000	10064	<u>BB1</u>	functional	approved	test	unverified		The PRONG CI shall notify the operations staff when the size of a granule input to a Data Processing Request is not within a pre-assigned range.
S-DPS- 24000 24005	9907	<u>BB0</u>	functional	approved	test	unverified		PRONG CI mode-specific applications shall access data only for the mode in which the application is configured.
S-DPS- 24010	9908	<u>BB1</u>	functional	approved	test	unverified		The PRONG CI shall include the mode identifier in activity log record entries for cost and accounting data.
S-DPS-	10068	<u>BB1</u>	functional	approved	test	unverified		The PRONG CI shall notify the operations staff

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24010								when the size of a granule output by Data Processing
<u>24015</u>								Request is not within a pre-assigned range.
S-DPS-	11560	<u>₿₿1</u>	functional	approved	test	unverified		The PRONG CI shall be capable of checking core
24020								metadata values of output data granules against a
								predefined list of values.
S-DPS-	10072	<u>BB1</u>	functional	approved	test	unverified		The PRONG CI shall be capable of checking core
24030								metadata values of output data granules against a
								predefined range of values.
S-DPS-	9909	<u>BB0</u>	functional	approved	test	unverified		PRONG CI mode-specific applications shall be
24040								capable of simultaneous execution in different modes
								on the same machine.
S-DPS-	10075	<u>₿B1</u>	functional	approved	test	unverified		The PRONG CI shall be capable of checking product
24040								specific metadata values of output data granules
<u>24045</u>								against a predefined list of values.
S-DPS-	9910	<u>BB0</u>	functional	approved	test	unverified		PRONG CI mode-specific applications shall be
24050								capable of simultaneous execution in different modes
								on different machines.
S-DPS-	10077	<u>₿B1</u>	functional	approved	test	unverified		The PRONG CI shall be capable of checking product
24050								specific metadata values of output data granules
<u>24055</u>								against a predefined range of values.
S-DPS-	9911	<u>BB0</u>	functional	approved	test	unverified		PRONG CI server applications shall register within
24060								their mode-associated namespace in the CSS name
								service.
S-DPS-	9912	<u>BB0</u>	functional	approved	test	unverified		PRONG CI client applications shall incorporate a
24070								mode identifier for CSS name service lookups.
S-DPS-	9913	<u>BB0</u>	functional	approved	test	unverified		The PRONG CI shall be capable of using simulated
24080								time values supplied by CSS, when executing in a
								non-production mode.
S-DPS-	9914	<u>BB0</u>	functional	approved	test	unverified		PRONG CI mode-specific executables and scripts
24090								shall accept a specific mode only at startup.
S-DPS-	10637	<u>BB0</u>	functional	approved	inspectio	unverified	96-	The PRONG CI shall provide a copy of Sybase
25000				11	n		0754A	RDBMS for use by ASTER PGEs run in the
								production environment at the EROS Data Center.
S-DPS-	11679	<u>BB0</u>	functional	approved	test	unverified	96-	The PRONG CI shall process the EOS-AM
30300				1			1059A	spacecraft ancillary data to assess the quality of
								onboard orbit data to detect and note in metadata the
								following conditions:
								a. missing data
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	S-DPS- 80320	11680	<u>₿₿0</u>	functional	approved	test	unverified	96- 1059A	b. erroneous data (i.e. if distance from origin deviates greatly from a neighboring set of points or if magnitude of velocity deviates greatly from the neighboring set of velocities) excluding data that reflects orbit adjust maneuvers The PRONG CI shall generate reports on the quality of onboard orbit data, noting: a) the number of missing data are more than a specified limit value over a specified time interval b) the number of contiguous missing data are more than a specified value
	S-DPS- 80600	11681	₿ <u>₿0</u>	functional	approved	test	unverified	96- 1059A	The PRONG CI shall process the EOS-AM spacecraft ancillary data to assess the quality of onboard attitude data contained in the EOS-AM spacecraft ancillary data to detect and note in metadata the following following conditions: a) missing data b) erroneous data (i.e. invalid Euler angle, invalid Euler angle rate).
	S-DPS- 80710	8677	<u>₿</u> <u>₿</u> 0	functional	approved	test	unverified		The PRONG CI shall provide to the SDP Toolkit, at a minimum, the following metadata with the ephemeris data files for EOS-AM processing: a) time range b) orbit number range c) platform
	S-DPS- 80750	8678	<u>₿₿0</u>	functional	approved	test	unverified		The PRONG CI shall provide to the SDP Toolkit orbit and attitude data including platform position and velocity vectors and platform attitude/attitude rate data, in the native format of the host hardware for EOS-AM processing.
	S-DPS- 30770	8679	<u>BB0</u>	functional	approved	test	unverified		The PRONG CI shall provide to the SDP Toolkit orbit and attitude data, including platform position and velocity vectors and platform attitude/attitude rate data, in HDF-EOS format for EOS-AM processing.
	S-DPS- 30900	11682	<u>BB0</u>	functional	approved	test	unverified	96- 1059A	The PRONG CI shall provide to the SDP Toolkit EDOS-generated L0 PDS as header and quality parameters all contained in the same physical file as the L0 telemetry packets.
ΙĿ	S-DPS-	11683	<u>BB0</u>	functional	approved	test	unverified	96-	The PRONG CI shall provide to the SDP Toolkit

30910							1059A	EDOS-generated L0 PDS containing header information as specified in the EDOS-ECS ICD.
S-DPS- 30920	11684	<u>₿</u> <u>B0</u>	functional	approved	test	unverified	96- 1059A	The PRONG CI shall provide to the SDP Toolkit EDOS-generated L0 PDS containing quality information as specified in the EDOS-ECS ICD.
S-DPS- 31010	11685	<u>BB0</u>	functional	approved	test	unverified	96- 1059A	The PRONG CI shall provide to the SDP Toolkit EDOS-generated L0 header in the native format of the host hardware.
S-DPS- 31030	11686	<u>BB0</u>	functional	approved	test	unverified	96- 1059A	The PRONG CI shall provide, at a minimum, the following metadata information to the SDP Toolkit with EDOS-generated L0 data: a. Actual start time of staged L0 data b. Actual end time of staged L0 data c. Number of physical L0 data files staged d. Start time of L0 data as requested by EOS investigators through the planning/processing system e. End time of L0 data as requested by EOS investigators through the planning/processing system f. APID of each L0 data file g. Orbit number or orbit number range of the staged L0 data file
S-DPS- 40835	8685	<u>BB0</u>	functional	approved	test	unverified		The AITTL CI shall conform to the guidelines in version 5.1 of the ECS User Interface Style Guide.
S-DPS- 41100	11687	<u>BB0</u>	functional	approved	test	unverified	96- 1059A	The AITTL CI shall provide to the operations staff, via a GUI, the capability to display a list of Science Software Archive Packages in the Data Server.
S-DPS- 41110	11688	<u>BB0</u>	functional	approved	test	unverified	96- 1059A	The AITTL CI shall provide to the operations staff, via a GUI, the capability to display the metadata for a specific Science Software Archive Package.
S-DPS- 41120	11689	<u>₿</u> <u>B0</u>	functional	approved	test	unverified	96- 1059A	The AITTL CI shall provide to the operations staff, via a GUI, the capability to display a list of the files that comprise a specific Science Software Archive Package.
S-DPS- 41130	11690	<u>BB0</u>	functional	approved	test	unverified	96- 1059A	The AITTL CI shall provide to the operations staff, via a GUI, the capability to retrieve a copy of a specified file belonging to a specific Science

								Software Archive Package.
S-DPS- 41140	11691	<u>BB0</u>	functional	approved	test	unverified	96- 1059A	The AITTL CI shall provide to the operations staff, via a GUI, the capability to add a new Science Software Archive Package to the Data Server.
S-DPS- 41150	11692	<u>BB0</u>	functional	approved	test	unverified	96- 1059A	The AITTL CI shall provide to the operations staff, via a GUI, the capability to add or remove a file to or from the set of files comprising a specific Science Software Archive Package.
S-DPS- 41160	8692	<u>BB0</u>	functional	approved	test	unverified		The AITTL CI shall provide to the operations staff, via a GUI, the capability to edit the metadata for a specific Science Software Archive Package.
S-DPS- 41170	11693	<u>₿</u> <u>B0</u>	functional	approved	test	unverified	96- 1059A	The AITTL CI shall provide to the operations staff, via a GUI, the capability to remove a specific Science Software Archive Package from the Data Server.
S-DPS- 41190	11694	<u>BB0</u>	functional	approved	test	unverified	96- 1059A	The AITTL CI SSAP GUI for adding an Science Software Archive Package to the Data Server shall have the capability of accepting its inputs from a file.
S-DPS- 41200	10056	<u>BB0</u>	functional, security	approved	test	unverified		The AITTL CI shall provide the operations staff with the ability (a) to restrict update access to the Data Server to authorized personnel and (b) to maintain a record of updates made.
S-DPS- 41355	10058	<u>₿</u> <u>B0</u>	functional, security	approved	test	unverified		The AITTL CI shall provide the operations staff with the ability (a) to restrict update access to the PGE Database to authorized personnel and (b) to maintain a record of updates made.
S-DPS- 41360	10061	<u>BB0</u>	functional	approved	test	unverified		The AITTL CI shall be capable of accepting PGE information updates for the PDPS Database from a file.
S-DPS- 42330	10968	<u>BB0</u>	functional	approved	demo	unverified	96- 0996	The AITTL CI shall provide the capability for the operations staff to run binary executables without impacting other ongoing DAAC activities.
S-DPS- 42365	8699	<u>₿B1</u>	functional	approved	test	unverified		The operations staff shall have the capability to use MSS profiling capabilities to determine the computing resources utilized by the execution of a chain of PGEs.
S-DPS- 42630	10969	<u>BB0</u>	functional	approved	demo	unverified	96- 0996	The AITTL CI shall provide the capability for the operations staff to run PGEs in a parallel test or for

								a commissioning period, utilizing the Planning and Processing Subsystems and the Product output flagged as "test".
S-DPS- 60241	8700	В	performanc e	approved	test	unverified		The SPRHW CI processing time shall not exceed the overall end-to-end turnaround time of 24 hours minus the processing time of other subsystems involved in instrument product processing.
S-DPS- 60251	8702	<u>BB0</u>	performanc e	approved	test	unverified		The SPRHW CI storage capacity shall be sized in accordance with the volume requirement derived from Appendix E (Section E.2 Table E-2) of the current version of 304-CD-005.
S-DPS- 60260	8703	В	performanc e	approved	test	unverified		The SPRHW CI processing shall be sized in accordance with DAO processing requirements derived from Appendix E (Section E.1 Table E-1) of the current version of 304-CD-005.
S-DPS- 60270	8704	<u>₿B1</u>	performanc e	approved	test	unverified		The SPRHW CI storage capacity shall be sized in accordance with the DAO data volume requirement derived from Appendix E (Section E.1 Table E-1) of the current version of 304-CD-005.
S-DPS- 60351	8705	<u>BB0</u>	performanc e	approved	test	unverified		The SPRHW CI shall contribute to the generation of Level 1 Standard Products within 24 hours after processing is initiated.
S-DPS- 60361	8706	<u>BB1</u>	performanc e	approved	test	unverified		The SPRHW CI shall contribute to the generation of Level 2 Standard Products within 24 hours after processing is initiated.
S-DPS- 60371	8707	<u>BB1</u>	performanc e	approved	test	unverified		The SPRHW CI shall contribute to the generation of Level 3 Standard Products within 24 hours after processing is initiated.
S-DPS- 60410	8708	<u>BB0</u>	operational	approved	test	unverified		The SPRHW CI shall be capable of operating in a 24 hour per day, 7 days a week mode.
S-DPS- 61125	8709	<u>BB0</u>	functional	approved	test	unverified		The SPRHW CI POSIX.2 compliant platform shall have the following utilities installed at a minimum: perl, emacs, gzip, tar, imake, prof, gprof, nm, gtar, and gmake.
S-DPS- 65000	10636	<u>₿</u> <u>₿</u> 0	functional	approved	inspectio n	unverified	96- 0754A	The SPRHW CI at the EROS Data Center shall provide, for production use by ASTER science software, a platform capable of supporting the ASTER Lookup Table database management system

				processing requirements.